CLAIMS

What is claimed is:

1.   A method for initiating a data storage facility recovery process in a data processing system having a first peer data storage facility and a second peer data storage facility communicating with the first peer data storage facility by a communication link, the method comprising:

executing a first write operation to store data from a host computer to the first peer data storage facility;

executing a second write operation to copy the stored data over the communication link from the first peer data storage facility to the second peer data storage facility;

monitoring the data associated with the second write operation to determine if the data contains an error; and

instructing the first peer data storage facility to initiate a first error recovery operation on the first peer data storage facility upon detection of the error.

2.   The method of claim 1, wherein instructing the first peer data storage facility to initiate the first error recovery operation comprises instructing the first peer data storage facility by communication over a second communication link, separate from the first communication link.

3.   The method of claim 1 wherein the first error recovery operation comprises issuing a device specific control function causing a warmstart on the first peer data storage facility.

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4.   The method of claim 1 wherein monitoring comprises:

defining a trigger event; and

analyzing a running text log buffer associated with the second write operation to detect the trigger event.

5.   The method of claim 4 wherein the trigger event comprises a predetermined data string.

6.   The method of claim 1, further comprising directing the first peer data storage facility to store a first root cause data set upon instruction to initiate the first error recovery operation.

7.   The method of claim 6 wherein the first root cause data set comprises:

a record of the state of the first peer data storage facility at the time of determination of the error; and

a continuous event log buffer.

8.   The method of claim 1 further comprising instructing the second peer data storage facility to initiate a second error recovery operation on the second peer data storage facility upon detection of the error

9.   The method of claim 1 further comprising:

instructing the second peer data storage facility to respond to the first peer data storage facility in association with the second write operation;

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monitoring the response to detect if the response indicates a problem with the second write operation; and

instructing the second peer data storage facility to initiate a second error recovery operation on the second peer data storage facility upon detection of the problem with the second write operation.

10. A data storage system coupled to a host computer comprising:

a first peer data storage facility ;

a second peer data storage facility communicating with the first peer data storage facility by a communication link;

means for storing data from the host computer by a first write operation to the first peer data storage facility;

means for executing a second write operation to copy the stored data over the communication link from the first peer data storage facility to the second peer data storage facility;

monitoring apparatus associated with the second peer data storage facility to determine if the data associated with the second write operation contains an error; and

means responsive to the monitoring apparatus for instructing the first peer data storage facility to initiate a first error recovery operation on the first peer data storage facility upon detection of an error.

11. The data storage system of claim 10, further comprising a second communication link between the first peer data storage facility and the second peer data

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storage facility, separate from the first communication link, for instructing the first peer data storage facility to initiate the first error recovery operation.

12.   The data storage system of claim 10, further comprising:

means for directing the first peer data storage facility to store a first root cause data set upon instruction to initiate the first error recovery operation.

13.   The data storage system of claim 12 wherein the first root cause data set comprises:

a record of the state of the first peer data storage facility at the time of determination of the error; and

a continuous event log buffer.

14.   The data storage system of claim 10 further comprising:

means for instructing the second peer data storage facility to respond to the first peer data storage facility in association with the second write operation;

means for monitoring the response to detect if the response indicates a problem with the second write operation; and

means for instructing the second peer data storage facility to initiate a second error recovery operation on the second peer data storage facility upon detection of the problem with the second write operation.

15.   An article of manufacture for use in programming a data storage system to initiate a data recovery process, the data storage system having a first peer data

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storage facility and a second peer data storage facility communicating with the first peer data storage facility by a communication link and the article of manufacture comprising a storage medium having logic embedded therein to cause components of the data storage system to:

execute a first write operation to store data from a host computer to the first peer data storage facility;

execute a second write operation to copy the stored data over the communication link from the first peer data storage facility to the second peer data storage facility;

monitor the data associated with the second write operation to determine if the data contains an error; and

instruct the first peer data storage facility to initiate a first error recovery operation on the first peer data storage facility upon detection of the error.

16. The article of manufacture of claim 15 wherein the logic further causes components of the data storage system to instruct the first peer data storage facility to initiate a first error recovery operation by communication over a second communication link, separate from the first communication link.

17. The article of manufacture of claim 15 wherein the logic further causes components of the data storage system to initiate the first error recovery operation by issuing a device specific control function causing a warmstart on the first peer data storage facility.

18. The article of manufacture of claim 15 wherein the logic further causes components of the data storage system to direct the first peer data storage facility to

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store a first root cause data set upon instruction to initiate the first error recovery process.

19.   The article of manufacture of claim 15 wherein the logic further causes components of the data storage system to instruct the second peer data storage facility to initiate a second error recovery operation on the second peer data storage facility upon detection of the error.

20.   The article of manufacture of claim 15 wherein the logic further causes components of the data storage system to:

    instruct the second peer data storage facility to respond to the first peer data storage facility in association with the second write operation;

    monitor the response to detect if the response indicates a problem with the second write operation; and

    instruct the second peer data storage facility to initiate a second error recovery operation on the second peer data storage facility upon detection of a problem with the second write operation.

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